

2000 Missouri State Park and Historic Site Visitor Survey Overall Composite

Project Completion Report

Submitted to

Missouri Department of Natural Resources Division of State Parks

Prepared by

Dawn K. Fredrickson C. Randal Vessell Ph.D.

Department of Parks, Recreation, & Tourism School of Natural Resources University of Missouri-Columbia

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Acknowledgements

Conducting and successfully completing a study of this magnitude and complexity could not have been accomplished without the cooperation of many individuals. Almost 1,600 visitors to Missouri State Parks participated in the 2000 Missouri State Park and Historic Site Visitor Survey. In many cases these individuals graciously extended their stay at particular recreation sites so that they could complete the questionnaire. It is clear from their input that these visitors care very much for the recreation resources in the Missouri State Park System. Their efforts will provide invaluable input into the planning process and providing for more effective and responsive management of these resources.

Many other individuals provided assistance during the 2000 Missouri State Park and Historic Site Visitor Survey, without whom the study would not have been a success. The following expressions of gratitude are in acknowledgement of their contributions. Special acknowledgement goes to the staff of the seven parks and historic sites included in the study, for their willingness to accommodate the survey crew during the study period and also for their assistance during sampling. Many thanks also go to the research assistants, volunteers, and park staff who assisted in the data collection. They are: Dennis Stevenson, Betty Grossi, Steve Sitton, Cheryl Hoffman, Luke Scheele, Michelle Ward, Beatriz Burgos, Debra Stevenson, and Tucker Fredrickson. A special thank you also goes to Licheng Lin, who assisted in computer data entry of the questionnaires.

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Introduction

NEED FOR RECREATION RESEARCH

With an estimated annual visitation of 18 million recreationists to Missouri's state parks and historic sites, research addressing such issues as recreation demand, visitor satisfaction, and resource degradation becomes an urgent necessity for natural resource recreation managers seeking to provide quality recreational experiences to their customers while at the same time protecting the natural environment. The task of providing quality visitor experiences and meeting recreation demand while maintaining an ecological equilibrium becomes even more difficult when combined with the complexities associated with measuring quality in outdoor experiences.

Ouality in outdoor recreation has often been measured in terms of visitor satisfaction (Manning, 1999), making visitor satisfaction a primary goal of natural resource recreation managers (Peine, Jones, English, & Wallace, 1999). Visitor satisfaction, however, can be difficult to define because satisfaction is a multidimensional concept affected by a number of potential variables, some under the control of management but many not (Manning, 1999). Visitor satisfaction is also subject to the varying socio-demographic characteristics of the visitor, their cultural preferences and levels of experience, as well as their widely ranging attitudes and motivations (Manning, 1999). The 2000 Missouri State Parks Visitor Study attempts to overcome the difficulty in defining visitor satisfaction by gathering additional information about visitor

satisfaction through questions regarding:
a) visitors' socio-demographic
characteristics; b) visitors' satisfaction
with programs, services and facilities;
c) visitors' perceptions of safety; and d)
visitors' perceptions of crowding.

STUDY PURPOSE

In 1973, a research paper entitled "Recreation Research - So What?" criticized recreation research for not addressing "real problems" and for not being applicable to practical situations (Brown, Dyer, & Whaley, 1973). Twenty years later, this criticism was echoed by Glen Alexander, chief of the Ohio Department of Natural Resources, when he wrote, "Customer surveys are a dime a dozen in the private sector and are beginning to get that way in the public sector (Alexander, 1993, p. 168)." Alexander's complaint was that survey data was being filed away and not being utilized, particularly by the front line management and operating people who could most benefit from such information.

A primary goal of this report is to provide practical and applicable customer data to those front line managers who most need this information during their daily operations. This report examines and compares the results of the visitor surveys conducted at Arrow Rock State Historic Site, Castlewood State Park, Deutschheim State Historic Site, Roaring River State Park, Route 66 State Park, Mark Twain Birthplace State Historic Site, and Mark Twain State

Park. Objectives specific to this report include:

- 1. Describing the use patterns of state park and historic site visitors.
- 2. Describing the socio-demographic characteristics of state park and historic site visitors.
- 3. Determining if there are differences in select groups' ratings of park and site attributes, satisfaction with park and site features, overall satisfaction, and perceptions of crowding.
- Determining any differences in select characteristics of visitors who rated park and site safety high and those who did not.

STUDY AREAS

Arrow Rock State Historic Site

Arrow Rock State Historic Site, located in Saline County, is perhaps one of the most unique historic sites in the Missouri state park and historic site system in that it is not the self-contained area usually associated with most parks and sites. Not only does DSP own and manage several historic buildings within the town of Arrow Rock, but additional recreational opportunities have also been provided in an area south of the town, including a visitor center, campgrounds, and a day-use area. The unique setting of Arrow Rock contributed to the unusual methodology used to collect questionnaire data during the study period.

Castlewood State Park

Located in St. Louis County, Castlewood State Park is a day-use park providing almost 1,800 acres of beautiful greenspace in a growing suburb of metropolitan St. Louis. Offering picnic areas, several trails, and access to the Meramec River, Castlewood is extremely popular with bicyclists, hikers, and equestrian users alike.

Deutschheim State Historic Site

Deutschheim State Historic Site, located in historic Hermann, Missouri, preserves and interprets Missouri's German heritage. DSHS consists of four historic buildings: the Strehly House and Winery and the Pommer-Gentner House and its barn. Each building contains extensive collections of German culture, including period furnishings, tools, and other items associated with everyday German life. Visitors are guided through these buildings and two heritage gardens for a nominal admission fee of \$2.00.

Roaring River State Park

One of the oldest parks in Missouri's state park system, Roaring River State Park is located deep within the Ozarks in Barry County. A Mecca for trout fishermen, Roaring River offers many amenities for every type of outdoor recreationist including campgrounds, a riding stable, cabins, a swimming pool, a new lodge with a restaurant, a fish hatchery, ten miles of hiking trails, and a nature center.

Route 66 State Park

One of the newest parks in Missouri's state park system, Route 66 State Park offers a myriad of recreational opportunities to the day-user. Located along the Meramec River, Route 66 provides seven miles of trail for hiking, bicycling, and equestrian use, as well as a picnic area. The park's real claim to fame, however, is its visitor center, which houses exhibits relating the

history of Route 66 as well as the history of Times Beach.

Mark Twain Birthplace State Historic Site

Located in Monroe County, Mark Twain Birthplace State Historic Site commemorates the life of one of Missouri's best-loved authors, Samuel Langhorne Clemens, better known as Mark Twain. The historic site consists of a museum housing Mark Twain's birth home, exhibits describing his childhood and adult life, and a public reading room containing a collection of first editions and foreign editions of his works. The site also provides a playground, picnic area, and lake overlook.

Mark Twain State Park

The third oldest park in Missouri's state park system, Mark Twain State Park is located in Monroe County and borders the 18,000-acre Mark Twain Lake. Popular with fishermen and boaters alike, Mark Twain State Park offers a myriad of recreational opportunities, including a swimming beach, two boat ramps, a campground, picnic areas and shelters, hiking trails and lake overlooks.

SCOPE OF STUDY

The population of the visitor study at the seven state parks and historic sites consisted of all visitors who were 18 years of age or older (adults), and who visited these areas during peak use (generally between July and October 2000). The results of this study only reflect visitors during the study periods surveyed at each park and site.

Methodology

The following is a brief description of the methodology used during the 2000 Missouri State Park and Historic Site Visitor Survey. For a more complete explanation of the methodology used at each state park and historic site, please refer to their individual reports (Fredrickson & Vessell, 2000b, 2001a, 2001b, 2001c, 2001d, 2001e, and 2001f).

SAMPLING PROCEDURES

A 95% confidence interval was chosen for each park and site. Margins of error ranged from plus or minus 5% to plus or minus 9% based on the sample sizes from each park and site survey. The study period for the 2000 Missouri State Park and Historic Site Visitor Survey was from July 1 to December 31, 2000, depending upon peak use for each park and site. A random sample of adult visitors (18 years of age and older) who visited the seven state parks and sites during the study period were the respondents for this study.

Time slots were chosen for sampling dependent upon hours of operation at each park and site. A time slot was randomly chosen for each of the seven parks and sites and assigned to the first of the scheduled survey dates for those parks and sites. Thereafter, time slots were assigned in ranking order based on the first time slot. This method was chosen to allow visitors leaving the parks and sites at various times of the day an equal opportunity for being sampled.

QUESTIONNAIRE

The questionnaires used in this study were based on the questionnaire developed by Fink (1997) for the Meramec State Park Visitor Survey. Copies of the questionnaires for this study are provided in Appendix A.

SELECTION OF SUBJECTS

The surveys of visitors during the 2000 Missouri State Park and Historic Site Visitor Survey were administered onsite, to eliminate the non-response bias of a mail-back survey. Where possible, exit surveys were conducted of visitors leaving the various parks. At these parks, a systematic sampling of all adults in every *n*th vehicle (pre-determined by past years' visitation data) was conducted as the vehicles exited. Exit surveys were conducted at Castlewood State Park.

Because an exit survey was not always feasible at every park due to public roadways traveling through the parks, multiple recreational areas, multiple exits, etc., on-site surveys of identified recreation areas within these parks and sites were conducted. On-site, roving surveys were conducted at Arrow Rock State Historic Site, Deutschheim State Historic Site, Roaring River State Park, Route 66 State Park, Mark Twain Birthplace State Historic Site, and Mark Twain State Park. Exit surveys, however, provide the most robust sampling strategy to precisely define the visitor population (Peine, et al., 1999). It is recommended, therefore, that in future studies exit surveys be conducted

at other state parks and historic sites if at all possible.

DATA COLLECTION

The surveyors were either stationed at the entrances into the various parks or recreation areas or walked roving routes between the recreation areas at the parks. During the selected time slot, the surveyors asked every visitor who was 18 years of age and older and in exiting vehicles or at the various recreation areas to voluntarily complete the questionnaire, unless he or she had previously filled one out.

To increase participation rates, respondents were given the opportunity to enter their name and address into a drawing for a prize package and were assured that their responses to the survey questions were anonymous and would not be attached to their prize entry form. Willing participants were then given a pencil and a clipboard with the questionnaire and prize entry form attached. Once respondents were finished, the surveyors collected the completed forms, clipboards, and pencils. Survey protocol is given in Appendix B and a copy of the prize entry form is provided in Appendix C.

Observation surveys were also conducted to obtain additional information about: date, day, time slot, and weather conditions of the survey day; the number of adults and children in each group of survey participants; and the number of individuals asked to fill out the questionnaire, whether they were respondents, non-respondents, or had already participated in the survey. This number was used to calculate response rate, by dividing the number of useable surveys collected by the number of adult

visitors asked to complete a questionnaire.

DATA ANALYSIS

The data obtained for the 2000 Missouri State Park and Historic Site Visitor Survey was analyzed with the Statistical Packages for the Social Sciences (SPSS) (SPSS, 1996). Frequency distributions and percentages of responses to the survey questions were determined. The number of surveys completed by weekday versus weekend and by park and site was also determined.

Comparisons using independent sample t-tests for each group were also made to determine any statistically significant differences (p<.05) in the following selected groups' satisfaction with park and site features, ratings of park and site attributes, overall satisfaction, and perceptions of crowding. The selected groups include:

- 1. First time visitors versus repeat visitors.
- 2. Overnight visitors versus dayusers. Day-users include both day-users and the overnight visitors who did not stay overnight in the seven parks and sites. Overnight visitors include those visitors who stayed overnight in the parks, whether they were camping or staying in other facilities within the parks.
- 3. Weekend visitors versus weekday visitors. Weekend visitors were surveyed on Saturday and Sunday, weekday visitors were surveyed Monday through Friday.

Other comparisons were made using independent sample t-tests to determine

in any statistically significant differences in visitors who rated the parks as excellent on being safe versus visitors who rated the parks and sites good, fair, or poor on being safe, for the following categories:

- 1. First time versus repeat visitors.
- 2. Overnight visitors versus day-
- 3. Weekend versus weekday visitors.

Differences between visitors who rated the parks and sites as excellent on being safe versus those who did not were also compared on the following questions: differences in socio-demographic characteristics, differences in perceptions of crowding, measures of satisfaction with park and site features, measures of performance of park and site attributes, and overall satisfaction.

An additional independent sample t-test compared overall satisfaction between visitors who felt some degree of crowding and visitors who were not at all crowded.

Results and Discussion

This section describes the results of the 2000 Missouri State Park and Historic Site Visitor Survey. For a more in-depth examination of the results from the seven state park and historic site surveys, see the individual reports of each survey (Fredrickson & Vessell, 2000b, 2001a, 2001b, 2001c, 2001d, 2001e, and 2001f). This section also provides relevant management implications and future research suggestions.

SURVEYS COLLECTED & RESPONSE RATES

A total of 1,599 surveys were collected during the 2000 Missouri State Park and Historic Site Visitor Survey. Table 1 shows the number of surveys collected at each state park and historic site. The overall response rate was 77.8%. Overall response rates ranged from 56.0% to 100.0%.

Of the 1,599 surveys collected, 1,069 (66.9%) were collected on the weekends (Saturday and Sunday), and 530 (33.1%) were collected on the weekdays (Monday through Friday).

PROFILE OF VISITORS

Table 2 individually lists the sociodemographic characteristics of the visitors to the seven state parks and historic sites. The following results describe overall visitor sociodemographic characteristics and use patterns of the seven parks and sites.

When grouped into four categories, 28.5% of the adult visitors to the seven parks and sites were between the ages of 18-34, 47.0% were between the ages of 35-54, 14.9% were between the ages of 55-64, and 9.6% were 65 years of age or older. The average age of all adult visitors was 44, with visitors to Castlewood State Park having the lowest average age (36.5) and visitors to Deutschheim State Historic Site having the highest average age (50). This difference in age is due in part to the recreational resources at Castlewood State Park attracting younger visitors and the recreational resources at Deutschheim State Historic Site attracting older visitors and retirees.

Table 1. Surveys Collected by State Park and Historic Site

Park	Frequency	Percent
Arrow Rock State Historic Site	193	12.1%
Castlewood State Park	402	25.1%
Deutschheim State Historic Site	113	7.1%
Roaring River State Park	362	22.6%
Route 66 State Park	198	12.4%
Mark Twain Birthplace State Historic Site	180	11.3%
Mark Twain State Park	<u>151</u>	9.4%
Total	1,599	100.0%

Visitors were almost equally male and female, with males comprising 52.5% of all visitors and females comprising 47.5% of all visitors. The majority (42.8%) of all visitors indicated having completed a four-year college degree (26.9%) or an advanced graduate degree (15.9%) as the highest level of education completed. One-third (33.5%) indicated having completed vocational school (5.8%) or some college (27.7%). Less than one-fourth (23.7%) of visitors indicated having grade school (1.0%) or high school (22.7%). Visitors to Castlewood State Park had the highest level of education, with over half (53.7%) of the visitors to Castlewood having completed a four-year college degree or an advanced graduate degree.

Most visitors (35.1%) reported having an annual household income of between \$25,000 and \$50,000. Twenty-seven percent (26.7%) of visitors reported an annual income of between \$50,000 and \$75,000. Almost one-fourth (24.4%) of visitors reported an annual income of over \$75,000, and 13.8% indicated an annual income of less than \$25,000. Castlewood State Park visitors reported having higher annual incomes when compared to the other parks. Over half (56.3%) of Castlewood State Park visitors indicated having a household income of over \$50,000. Castlewood's location within the St. Louis metropolitan area and the high percentage of its visitors with four-year college degrees or advanced graduate degrees combine to account for the higher level of household incomes of Castlewood visitors.

The majority (37.5%) of visitors indicated a professional/technical occupation, 15.0% indicated a service-

based occupation, and 14.4% indicated retirement status. Visitors indicated other occupations, and they included: 9.6% self-employed, 8.7% manufacturing-based, 6.6% homemaker, 6.2% student, and 2.1% "other". A significantly (p<.001) higher percentage of visitors who visited Roaring River (21.3%), Arrow Rock (20.0%), and Deutschheim (19.4%) reported being retired than the other four parks and sites, while a significantly higher percentage of visitors to Castlewood (14.4%) reported being students than any of the other parks and sites. Again, this difference in percentages may be due in part to the amenities and recreational opportunities offered at the different parks and sites, Castlewood attracting younger recreationists and Roaring River, Arrow Rock, and Deutschheim attracting older visitors and retirees.

The majority (31.8%) of visitors were married with children still living at home, but another large percentage (26.1%) were married with children grown. Twenty-one percent (21.5%) of visitors were single with no children, 12.0% were married with no children, 6.6% were single with children, and 3.0% indicated an "other" household composition. Again, significant differences existed in household composition of visitors to each of the seven parks and sites. For instance, a significantly (p<.001) higher percentage (35.9%) of visitors to Castlewood State Park were single with no children, whereas the majority (43.9%) of visitors to Deutschheim State Historic site were married with children grown. These differences in household composition also suggest that the diversity of recreational opportunities offered by the parks and sites contribute to the diversity of visitor makeup.

The vast majority (96.0%) of visitors to the parks and sites were White, while 1.2% were Hispanic, 0.9% were African American, and 0.5% were Asian. One percent (1.2%) of the visitors indicated being of Native American descent, and 0.2% indicated an "other" ethnic background. Figure 1 depicts the ethnic origin of visitors surveyed during the 2000 Missouri State Park and Historic Site Visitor Survey.

The majority (73.5%) of visitors to the seven state parks and historic sites were from Missouri, with 4.8% of the visitors from Illinois, 4.4% from Arkansas, 3.7% from Oklahoma, 3.4% from Kansas, and

Figure 1. Ethnic Origin of 1999 Missouri State Park Visitors

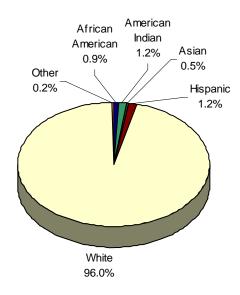
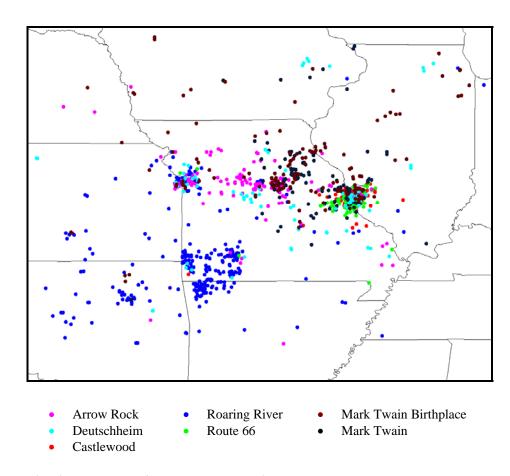


Figure 2. Residence of Visitors by Zip Code.



2.1% from Texas. Figure 2 shows the residence of visitors by zip code. Although overall the majority of visitors were from Missouri, over half (53.4%) of Roaring River's visitors were from out of state and 44.2% of Mark Twain Birthplace's visitors were from out of state.

DSP has expressed an interest in classifying visitors by their residence in Metropolitan Statistical Areas (MSA). The first attempt to classify state park visitors by their MSA was made with the 1999 Missouri State Parks Visitor data. The 2000 Missouri State Parks Visitor data has also been classified by MSA. While knowledge of visitor residence is potentially valuable, the profile of cumulative state park visitation is more relevant. It is recommended that visitor data from the 1997, 1998, 1999 and 2000 visitor survey data be combined and profiled for MSA residence.

Missouri has an overall population of approximately 5,468,000 residents, over two-thirds (68%) of whom live within a MSA (U.S. Census Bureau, 1999). St. Louis and Kansas City MSA residents account for almost 60% (59%) of Missouri residents (this includes Missouri residents only, and not the Kansas residents who live within the Kansas City MSA and the Illinois residents who live within the St. Louis MSA). Over one-third (35.8%) of Missouri residents alone live within the St. Louis MSA, and 23% live within the Kansas City MSA (Missouri State Census Data Center [MSCDC], 1998).

The majority (56.9%) of visitors were from the St. Louis Metropolitan Statistical Area, 6.7% were from the Kansas City MSA, 5.0% were from the Columbia MSA, 3.3% were from the Joplin MSA, 3.2% were from the Springfield MSA, 0.5% were from the St. Joseph MSA, and 24.6% were from

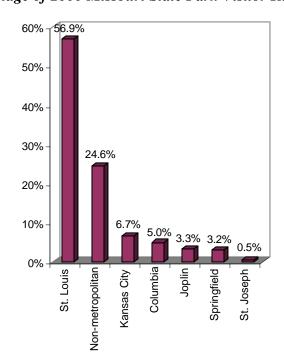


Figure 3. Percentage of 2000 Missouri State Park Visitor Residence in MSAs

non-metropolitan areas. Figure 3 shows the percentage of visitor residence in MSAs.

The high percentage of 2000 visitors from the St. Louis MSA can be accounted for by the visitors from both Castlewood State Park and Route 66 State Park (both located within the St. Louis MSA). Of the parks and sites surveyed in 2000, 100.0% of the Missouri visitors to Castlewood State Park were from the St. Louis MSA and

96.7% of the Missouri visitors to Route 66 were from the St. Louis MSA. Both Deutschheim State Historic Site and Mark Twain State Park also had higher percentages of their Missouri visitors from the St. Louis MSA (33.8% and 41.8% respectively). Figure 4 shows the percentage of MSA residence by park and site.

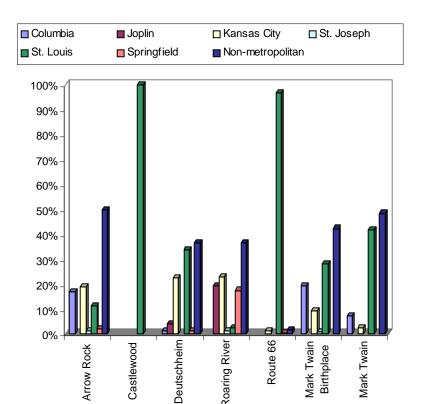


Figure 4. Residence in MSA by Park and Site

USE PATTERNS

Trip Characteristics

The majority (73.5%) of visitors to the seven state parks and historic sites traveled less than a day's drive to visit the parks and sites (a day's drive is defined as 150 miles or less, not exceeding 300 miles round trip). Of those traveling less than a day's drive, 63.7% lived within 50 miles of the parks and sites they were visiting. The average number of miles visitors traveled was 146.1 miles; however, the median number of miles visitors traveled was 58, indicating that half of the visitors traveled less than 58 miles and half traveled more than 58 miles.

Visit Characteristics

Two-thirds (64.6%) of visitors were repeat visitors. Castlewood State Park had the highest percentage of repeat visitors (85.1%), Deutschheim State Historic Site had the highest percentage of first time visitors (94.6%). The average number of times repeat visitors reported visiting the various parks and sites within the past year was 22.4 times, with a low of 0.9 times (Mark Twain Birthplace State Historic Site) and a high of 47.5 times (Castlewood State Park). These differences are due to the fact that Castlewood State Park visitors visit the park on a daily or weekly basis, particularly to use the hiking and biking trails, whereas visitors to historic sites typically only visit historic sites once.

The majority (85.6%) of visitors to the seven state parks and historic sites visited with family and/or friends, and average group size was about 2.4 people per group. Fourteen percent (13.5%) of

the visitors reported bringing a pet with them during their visits.

Across the parks, over half (55.5%) of the visitors were overnight visitors while 44.5% of visitors indicated they were not staying overnight during their visits. Of those visitors staying overnight, 62.7% of overnight visitors stayed in the campgrounds or other facilities within the parks. Average overnight stays were 2.9 nights, but ranged from 4 nights at Roaring River State Park to 1.6 nights at Deutschheim State Historic Site.

An interesting use pattern of visitors to the seven parks and sites is that the majority (59.3%) of campers staying in the campgrounds in the parks and sites reported staying in RVs compared to 40.7% of visitors staying in tents. Research has shown that RV campers tend to be older, between 50-65 years of age (Fruchter & Schau, 1997). Not surprisingly, RV campers from the 2000 Missouri State Park and Historic Site Visitor Survey were significantly (p<.001) older than tent campers, with an average age of 50.5 compared to 37.1 for tent campers.

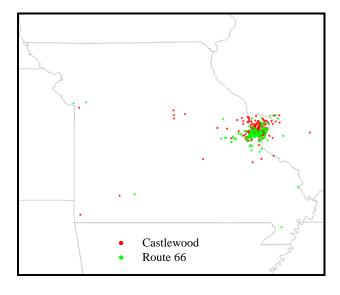
This age difference, as well as the higher percentage of campers who camp in RVs, suggest certain management implications for future management of state park campgrounds. This is especially true when considering that Baby Boomers (people 40-55 years of age – one-third of the visitors from the 2000 Missouri State Park and Historic Site Visitor Survey fall within this age category) already comprise 40% of the RV market (Fruchter & Schau, 1997). And as they age, Baby Boomers are expected to contribute significantly to the anticipated 40% growth in the RV

market within the next ten years (Fruchter & Schau, 1997). As Missouri's population ages, managers can expect to see an increase in the number of RV campers in their state park campgrounds.

Park Classifications

Based on visitor use patterns and zip code distribution, six of the seven state parks and historic sites included in the 2000 Missouri State Park and Historic Site Visitor Survey can be classified into three distinct types of parks. For instance, two of the parks were parks whose visitors were day-users who primarily traveled 25 miles or less to visit these parks (Figure 5). Castlewood State Park and Route 66 State Park are included in this category, since both parks are day-use only parks. Both of these parks have a high percentage of repeat visitation, and their visitors tend to make many repeat visits annually, suggesting that visitors to these two parks may view them as similar to city or municipal parks. For instance, Castlewood visitors visited an average of 47.5 times in the past year; Route 66

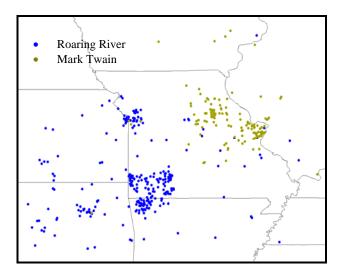
Figure 5. Local, Day-Use Parks



visitors visited an average of 29.3 times in the past year.

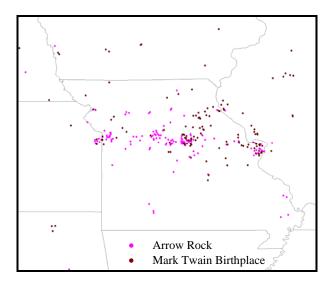
A second classification of parks includes those parks whose visitors were primarily overnight visitors, the majority of whom traveled less than a day's drive to visit the parks but who typically traveled from a regional area between 50 and 150 miles from the parks (Figure 6). Parks within this category include Mark Twain State Park and Roaring River State Park. The locations of both of these parks, as well as the amenities and recreational opportunities offered at the parks, bring visitors from farther away and tend to be the primary destination of their visitors, thus increasing the number of those visitors staying overnight.

Figure 6. Regional, Overnight
Destination Parks



A third classification includes two of the historic sites surveyed during the 2000 Missouri State Park and Historic Site Visitor Survey: Arrow Rock State Historic Site and Mark Twain Birthplace State Historic Site (Figure 7). Although the majority of visitors to these two sites traveled less than a day's drive (150 miles) to visit the sites, the majority of those visitors still traveled between 50 and 150 miles to visit the sites and are considered to be more regional than local. The majority of visitors to Arrow Rock and Mark Twain Birthplace were also day-users and not overnight visitors, suggesting that these two sites can be classified as day-trip destination sites.

Figure 7. Regional, Day-Use Sites

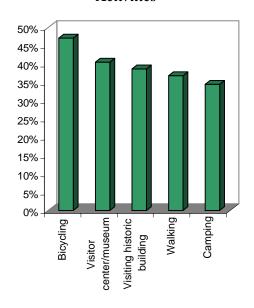


Deutschheim State Historic Site was an anomaly in the state park classification system. The majority of visitors to Deutschheim traveled more than a day's drive to visit the site, and the majority also indicated staying overnight during their visit. However, the site itself was not the primary destination of most of the visitors to the site. A large percentage of visitors to the historic site indicated they only found out about Deutschheim while visiting the Hermann area (Fredrickson & Vessell, 2001f), thus making Hermann the primary destination and the historic site a secondary destination for most visitors.

Recreation Activity Participation

Although recreation activities differed across the seven parks and sites, several activities were common to many of the parks and sites. For example, 47.2% of all visitors surveyed indicated that they bicycled during their visits, 40.7% said they visited the visitor center or museum located within some of the parks and sites, 38.7% said they visited a historic building, and 36.9% said they walked during their visits. Thirty-four percent (34.4%) of visitors reported camping during their visits, 27.9% reported viewing wildlife, and 26.9% participated in fishing. Other activities in which visitors participated were hiking (25.2%), swimming (24.8%), picnicking (24.5%), studying nature (12.1%), running or jogging (11.5%), boating (8.0%), attending a special event (5.9%), attending a naturalist-led program (5.6%), and horseback riding (1.8%). Figure 8 shows the percentage of participation in the five highest recreational activities.

Figure 8. Participation in Recreational Activities



Of note is the small number of visitors who reported attending a naturalist-led program. Of the seven parks and sites surveyed, only Mark Twain State Park and Roaring River State Park offered naturalist-led programs. However, when asked how satisfied they were with the programs provided at these parks, a majority (69.3%) of visitors to the two parks didn't know how to rate how satisfied they were. These results combined with the low number of visitors attending nature programs suggest that visitors are not aware of the nature programs and thus do not attend them.

SATISFACTION MEASURES

Overall Satisfaction

When asked about their overall satisfaction with their visit, 1% of visitors reported being dissatisfied or very dissatisfied with their visit, whereas 30.1% of visitors were satisfied and 68.9% were very satisfied. Visitors' mean score for overall satisfaction was 3.68, based on a 4.0 scale with 4 being very satisfied and 1 being very dissatisfied. The mean scores for overall satisfaction between the seven parks and sites ranged from 3.87 to 3.55.

Overall, there was no significant difference in satisfaction between

weekend and weekday visitors, with mean overall satisfaction scores of 3.67 and 3.69. Nor was there any difference in overall satisfaction between overnight visitors and day-users. First time visitors were significantly (p<.01) more satisfied with their visitors than repeat visitors, with an overall satisfaction score of 3.73 compared to 3.65.

Management should be commended that 99% of visitors reported being satisfied or very satisfied with their visits. Williams (1989) states that visitor satisfaction with previous visits is a key component of repeat visitation. The high percentage of repeat visitation (64.6%) combined with their positive comments provide evidence that Missouri State Park visitors are indeed satisfied with their park experiences.

Satisfaction with Park Features

Visitors to each of the state parks and historic sites were asked to express their satisfaction with various park and site features. Although these features differed at each of the parks and sites, several features were common to most of the areas: campgrounds, picnic areas, park and site signs, trails, and boat launches. Table 3 lists the mean satisfaction scores of these features for each park and site. Figure 9 represents the satisfaction scores for each park and

v	•	•			
	Camp-		Picnic		В
	grounds	Signs	Areas	Trails	Ra

Table 3. Satisfaction of Features for Each Park and Site

	Camp-		Picnic		Boat
	grounds	Signs	Areas	Trails	Ramps
Arrow Rock	3.73	3.47	3.64	3.39	
Castlewood		3.45	3.39	3.45	3.10
Roaring River	3.49	3.42	3.44	3.38	
Route 66		3.45	3.30	3.50	
Mark Twain Birthplace		3.57	3.61		3.23
Mark Twain	3.63	3.43	3.50	3.31	
Overall	3.56	3.46	3.44	3.42	3.16

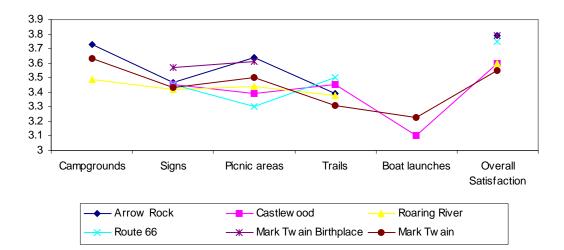


Figure 9. Satisfaction With Park and Site Features (By Park and Site)

site, as well as overall satisfaction for each park and site. Overall, campgrounds were given the highest satisfaction score (3.56) and boat launches were given the lowest (3.16). There were no significant differences between weekend and weekday visitors and their satisfaction ratings of the various park and site features, nor were there any differences between overnight visitors and day-users. There was a significant difference (p<.01), however, between first time and repeat visitors. First time visitors were significantly more satisfied (3.53) than repeat visitors (3.41) regarding the picnic areas.

The differences in overall satisfaction and picnic area satisfaction between first time and repeat visitors may suggest that repeat visitors might be noticing a decline in quality of care at the parks and sites. However, first time visitors do not have a frame of reference or previous experience on which to base expectations, perhaps contributing to their higher satisfaction ratings. Also, repeat visitors can develop a sense of

ownership to an area and can be more sensitive to perceived changes in area features, particularly if expectations in use levels are exceeded (Armistead & Ramthun, 1995). For instance, repeat visitors felt significantly (p<.001) more crowded than first time visitors. This higher perception of crowding may contribute to repeat visitors' lower satisfaction ratings.

PERFORMANCE RATING

Visitors to the seven parks and sites were asked to rate the performance of each regarding certain attributes: being free of litter and trash, having clean restrooms, upkeep of facilities, having helpful and friendly staff, accessibility for disabled visitors, caring for the natural resources, caring for the cultural resources, providing nature programs or nature displays/information, and being safe. Table 4 lists the mean performance scores of the attributes for each park and site, and Figure 10 illustrates these scores by park and site. Overall, caring for the cultural resources was given the

Table 4. Performance Scores of Specific Park and Site Attributes

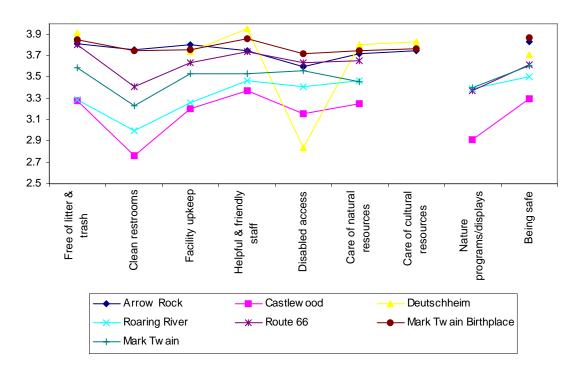
	Arrow			Roaring		Mark Twain	Mark	
	Rock	Castlewood	Deutschheim	River	Route 66	Birthplace	Twain	Overall
Free of litter/trash	3.81	3.28	3.92	3.29	3.80	3.85	3.59	3.55
Clean restrooms	3.76	2.76		3.00	3.41	3.75	3.23	3.23
Upkeep of								
facilities	3.80	3.20	3.74	3.27	3.63	3.76	3.53	3.53
Helpful/friendly								
staff	3.75	3.37	3.95	3.47	3.74	3.86	3.53	3.62
Disabled access	3.60	3.16	2.84	3.41	3.63	3.72	3.56	3.45
Care of natural								
resources	3.72	3.25	3.80	3.47	3.65	3.75	3.46	3.52
Care of cultural								
resources	3.75		3.83			3.77		3.78
Nature programs/								
displays		2.91		3.39	3.37		3.40	3.23
Being safe	3.83	3.30	3.71	3.50	3.62	3.87	3.61	3.58

highest performance rating while providing nature programs and/or displays was given the lowest rating.

There were significant differences between first time and repeat visitors and their performance ratings of the park and site attributes. First time visitors gave significantly higher (p<.01) performance ratings to the parks and sites being free

of litter and trash, to the parks and sites having clean restrooms, to upkeep of the facilities, to having helpful and friendly staff, to caring for the natural resources, to providing nature programs and/or displays, and to being safe. As suggested previously, the differences in ratings between first time and repeat visitors may be due in part to first time visitors not having past experiences on

Figure 10. Performance Ratings of All Visitors (By Park and Site)



which to base performance ratings. The differences may also be due in part to the sense of ownership repeat visitors may feel for an area, thus causing them to be more sensitive or critical to perceived changes in quality of care.

There were also significant differences (p<.05) in performance ratings between overnight visitors and day-users. For instance, day-users gave higher performance ratings to the parks and sites being free of litter and trash than overnight visitors. Overnight visitors, particularly campers, tend to generate more trash than day-users and thus may more readily notice full or overflowing trash receptacles, contributing to a lower performance rating in this area.

Overnight visitors, however, gave higher performance ratings than day-users to disabled accessibility, providing nature programs and/or displays, and being safe. For those parks and sites with campgrounds, disabled accessible campsites are prominently marked, whereas disabled accessible areas within day-use facilities may not be as noticeable, thus contributing to the lower rating given by day-users to disabled accessibility. The lower performance rating given to nature programs and/or displays may be due in part to the low percentage of participation by visitors in the nature programs. The majority (80.0%) of visitors who reported attending a nature program also reported camping in the parks or sites, suggesting that campers are the visitors most likely to attend nature programs. And finally, the difference in safety ratings may be explained by the fact that campground hosts and staff frequently patrol park and site campgrounds and are highly visible to campers, whereas day-users using the

other recreational areas might not encounter staff as frequently.

Significant differences (p<.05) were also found between weekend and weekday visitors. Weekday visitors had significantly higher (p<.05) performance ratings than weekend visitors regarding helpful and friendly staff and caring for the cultural resources. The lower performance rating given by weekend visitors regarding helpful and friendly staff may be influenced by the limited visual frequency and availability of park staff during the weekends.

A possible contributing factor to the low rating given by weekend visitors to caring for the cultural resources may be the multiple interpretations visitors ascribe to the word "cultural". It is recommended that the phrase "caring for the cultural resources" be reworded to "caring for the historical/cultural resources" for future studies. It is also recommended that this result be monitored over a period of time to determine if this particular response is repeated.

A second possibility contributing to the lower rating given by weekend visitors to caring for the cultural resources may be a function of where the three historic sites are located and whether the historic sites are primary or secondary destinations to weekend visitors. All three historic sites are located in areas that provide other recreational opportunities. For example, the town of Arrow Rock offers the Lyceum Theatre, many antique and specialty shops, restaurants, etc. that compete for use with the historic site, particularly on the weekends. Deutschheim State Historic Site is also located in an area (Hermann) that provides many other attractions. In fact, visitors to Deutschheim reported that the site was not their primary destination (Fredrickson & Vessell, 2001f) but a destination discovered only after visiting the Hermann area. Mark Twain Birthplace State Historic Site, located on Mark Twain Lake, may also be a secondary destination to weekend visitors participating in other area activities such as boating, fishing, swimming, etc.

IMPORTANCE-PERFORMANCE MEASURES

The Importance-Performance (I-P)
Analysis was used to analyze the
performance and importance ratings
given by visitors to nine park and site
attributes. Mean scores were calculated
for the responses of the two questions
regarding visitors' ratings of the
performance and importance of the parks
and sites being free of litter and trash,
having clean restrooms, upkeep of park
facilities, having helpful and friendly
staff, providing disabled access, caring
for the natural resources, caring for the

cultural resources, providing nature programs and/or displays, and being safe. Table 5 lists the scores of these attributes, which were based on a 4.0 scale of 4 being excellent and 1 being poor, and 4 being very important and 1 being very unimportant.

Figure 11 shows the Importance-Performance (I-P) Matrix. The crosshairs were set at the overall mean (3.53) of the performance scores and at the overall mean (3.68) of the importance scores. The mean scores were plotted on the I-P Matrix to illustrate the relative performance and importance ratings of the attributes by park and site visitors.

The I-P Matrix is divided into four quadrants to provide a guide to aid in possible management decisions. For example, the upper right quadrant is labeled "high importance, high performance" and indicates the attributes in which visitors feel the parks are doing a good job. The upper left quadrant indicates the characteristics on which management may need to focus

Table 5. Mean Performance and Importance Scores for Park and Site Attributes

	Mean Performance	Mean Importance
Attribute	Score*	Score*
A. Being free of litter/trash	3.55	3.82
B. Having clean restrooms	3.23	3.76
C. Upkeep of park facilities	3.48	3.73
D. Having helpful & friendly staff	3.62	3.60
E. Access for persons with disabilities	3.45	3.37
F. Caring for the natural resources	3.52	3.75
G. Caring for the cultural resources	3.78	3.78
H ₁ . Providing nature programs/displays	3.23	3.21
H ₂ . Providing nature programs/displays	3.59	3.58
I. Being safe	3.58	3.75

 $H_1 = All \text{ visitors}$ $H_2 = \text{Visitors attending nature programs}$

^{* 1 =} poor performance or low importance rating, 4 = excellent performance or high importance rating

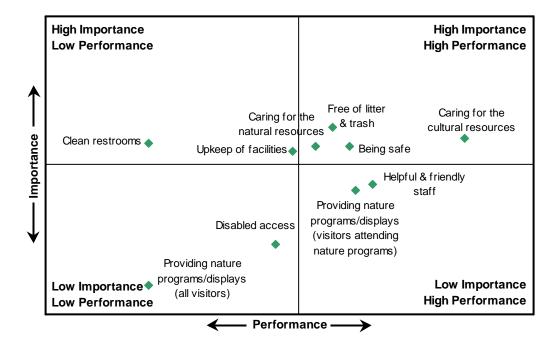


Figure 11. Importance-Performance Matrix of Park and Site Attributes

attention, because these are attributes that are important to visitors but were given lower performance ratings. The lower left and right quadrants are less of a concern for managers because they exhibit attributes that are not as important to visitors.

Overall, the seven parks and sites were given high importance and performance ratings for caring for the cultural resources (historic sites only), being safe, being free of litter and trash, and caring for the natural resources.

Management should be commended for the high ratings given to these characteristics, particularly safety.

Visitors gave restroom cleanliness and facility upkeep high importance ratings but low performance ratings. Restroom cleanliness and facility upkeep are often given lower ratings by visitors to state parks (Fredrickson & Vessell, 2000a), and could be a result of the large number of visitors to Missouri state parks and

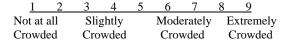
historic sites each year. Restroom cleanliness is also often a function of the type of visitor and where the restroom is located (Fredrickson & Vessell, 2001b and 2000e). For instance, visitors to day-use areas with pit toilets tend to rate restrooms lower than visitors to campgrounds or visitor centers, where flush toilets are more likely to be provided.

An interesting result is the high performance but lower performance rating given by visitors attending nature programs. As discussed previously, the majority of visitors attending nature programs were campers. Nature programs may not be a dominant expectation of campers in state park campgrounds, and so may not be as important to them as facility upkeep, clean restrooms, and safety. However, these results do not include the opinions of a primary beneficiary of nature programs: children. It is often the children who prompt adult participation

in nature programs; however, the results of this study reflect only the opinions of adult visitors and may be discounting the importance of nature programs to the children who visit state parks.

CROWDING

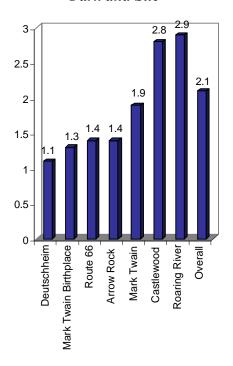
Visitors to each of the seven state parks and historic sites were asked how crowded they felt during their visit. The following nine-point scale was used to determine visitors' perceptions of crowding:



Visitors' overall mean response to this question was 2.1. Scores ranged from 1.1 (Deutschheim State Historic Site) to 2.9 (Roaring River State Park). Figure 12 shows the mean crowded score for each park. Overall crowding scores were low at even the parks that experience heavier use (Roaring River and Castlewood). Although crowding does not appear to be an issue at even the parks that experience heavier use, visitors to these parks may be more tolerant of greater use levels, having displaced visitors more sensitive to crowding. Research has suggested that as use levels increase, some recreationists become dissatisfied and alter their use patterns to avoid crowding, oftentimes visiting other, lesscrowded facilities instead (Manning, 1999).

While crowding was not a concern at all of the state parks and historic sites, overall it was an issue identified by many visitors as over a third (36.6%) of the visitors reported feeling some degree of crowding. Crowding is a perceptual

Figure 12. Mean Crowded Scores of Each
Park and Site

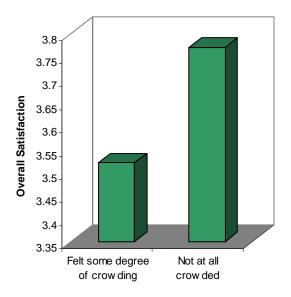


construct not always explained by the number or density of other visitors. Expectations of visitor numbers, the behavior of other visitors, and visitors' perceptions of resource degradation all play a significant role in crowding perceptions (Armistead & Ramthun, 1995; Peine et al., 1999). Although there were no significant differences in perceptions of crowding between weekend and weekday visitors, repeat visitors were significantly (p<.001) more crowded (2.3) than first time visitors (1.7). Overnight visitors were also significantly (p<.001) more crowded (2.6) than day-users (1.5). Visitors who felt some degree of crowding also gave significantly (p<.001) lower performance ratings regarding care of the natural resources (3.34) than visitors who were not at all crowded (3.63).

Particularly because visitors' perceptions of crowding can influence their overall

satisfaction (Armistead & Ramthun, 1995), comparisons were made to determine if there were significant differences in overall satisfaction between visitors who felt some degree of crowding and those visitors who were not at all crowded (Figure 13). Visitors who felt crowded had a significantly lower (p<.001) overall satisfaction rating (3.52) than visitors who were not crowded (3.77).

Figure 13. Overall Satisfaction is Lower for Those Who Felt Crowded



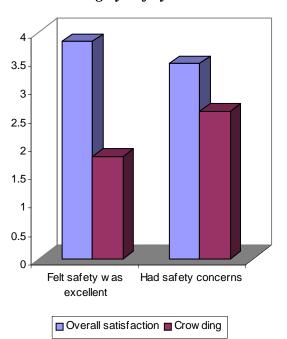
As perceptions of crowding are inversely related to overall satisfaction, park and site managers should address the issue of crowding. One option is to review comments from the individual parks and sites relating to crowding and consider options that would reduce crowding perceptions. Further study could also determine if crowding perceptions at the parks and sites are due to the number of people or perhaps the behavior of the visitors in the parks and sites.

SAFETY CONCERNS OF VISITORS

Almost two-thirds (63.9%) of visitors across the seven state parks and historic sites rated safety excellent. Safety was given a high importance, high performance rating on the I-P Matrix. Park and site managers should be commended for providing an atmosphere in which visitors feel safe. However, managers should not dismiss safety concerns of visitors. One-third (36.1%) of visitors did not give the parks and sites they visited an excellent rating regarding safety.

This is especially important as visitors with safety concerns had significantly lower (p<.01) overall satisfaction ratings, higher perceptions of crowding, lower satisfaction ratings of park and site features, and lower performance ratings than visitors who felt safety to be excellent. Figure 14 shows the differences in overall satisfaction and

Figure 14. Levels of Satisfaction and Crowding by Safety Concerns



perceptions of crowding between visitors who felt safety was excellent and visitors who had safety concerns.

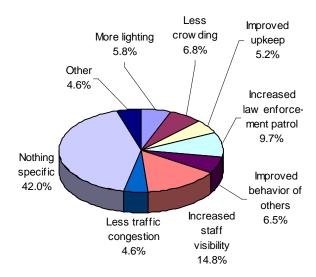
Visitors were also given a list of nine attributes and were asked to indicate which of the nine would most increase their feeling of safety at the parks and sites. Although instructed to select only one attribute, many visitors selected more than one; consequently, 1,313 responses were given by 1,108 respondents. Figure 15 shows the percentage of responses given by visitors. Although most (42.0%) felt that nothing specific would increase their feeling of safety, one-fourth (24.5%) felt that increased visibility of park staff and increased law enforcement patrol were the two attributes that would most increase their feeling of safety.

To address the safety concerns of state park and historic site visitors, one recommendation would be to examine the comments relating to safety from each of the seven parks and sites. Additional research could also focus on the effectiveness of approaches that address visitor safety perceptions, such as an increased or more visible patrol by park staff or park rangers.

VISITORS' SOURCES OF INFORMATION ABOUT MISSOURI STATE PARKS AND HISTORIC SITES

Visitors to each of the seven state parks and historic sites were asked to indicate how much information they receive from nine information sources regarding Missouri state parks and historic sites. Word of mouth from friends or relatives was the most frequently cited source of information, with 83.8% of the visitors responding to this question reporting they received some or lots of

Figure 15. Percentage of Safety Attributes Chosen by Visitors



information through this medium. The second most frequent source of information is from brochures, pamphlets, or other printed material. Sixty-two (62.1%) of visitors answering this question indicated receiving some or lots of information from this source.

Visitors were also asked how often they use the Internet when planning a trip or vacation. Forty-one percent (41.4%) of visitors frequently use the Internet, 15.5% always use it, 21.7% rarely use it, and 21.4% never use it when planning a trip or vacation. Although only 38.5% of visitors cited the Internet as a major source of information about state parks and historic sites, the 56.9% who frequently or always use it when planning a trip or vacation suggest that the Internet can become a useful promotional tool for state parks and historic sites.

HOW MUCH VISITORS VALUE MISSOURI STATE PARKS AND HISTORIC SITES

For the first time, the researchers have attempted to investigate the value that visitors attribute to a site visit. Literature has stated that the value a visitor places on a recreation opportunity is often difficult to measure with confidence and accuracy (Bergstrom & Loomis, 1999; Manning, 1999), and the researchers believe that our initial attempt at attributing a value perspective did not prove beneficial. At several of the parks and sites, visitors interpreted the value question to mean how much they would be willing to pay a day to visit the parks and sites rather than how valuable these parks and sites are to them. The researchers believe that visitors' misinterpretation of the question was affected by the wording of the question, and suggest that the question be reworded in future studies to avoid confusion and misinterpretation.

Visitors were asked to place a value on the overall recreational opportunity offered in a visit to the individual parks and sites, and were given four choices: \$3.00 a day, \$5.00 a day, \$7.00 a day, or any other value. The majority (42.2%) of visitors responding to this question indicated a value of \$3.00 a day, while 31.7% indicated a value of \$5.00 a day, 14.1% indicated a value of \$7.00 a day. and 12.0% indicated some other value. Of those indicating some other value, the majority (44.6%) indicated a value of \$0.00 per day, while 16.5% indicated a value of \$1.00 per day, and 15.7% indicated a value of \$10.00 per day.

RESEARCH RECOMMENDATIONS

The results of the present study serve as baseline visitor information for Arrow Rock State Historic Site, Castlewood State Park, Deutschheim State Historic Site, Roaring River State Park, Route 66 State Park, Mark Twain Birthplace State Historic Site, and Mark Twain State Park. The frequency and percentage calculations of survey responses from each of the seven state parks and historic sites provide useful information concerning socio-demographic characteristics, use patterns, and satisfaction of Missouri state park visitors. In addition, the "sub-analysis" of data is important in identifying implications for management at each of these parks. (The sub-analysis conducted for each survey included comparisons using t-tests, Chi-square, and ANOVA between selected groups and the Importance-Performance Analysis.) Additional relevant information may be determined from further sub-analysis of existing data. Therefore, it is recommended additional sub-analysis be conducted to provide even greater insight to management at each of the seven parks and sites.

Data collection should be on a continuum (Peine et al., 1999), which is why additional visitor surveys at the seven state parks and historic sites should also be conducted on a regular basis (e.g., every three, four, or five years). Future studies can identify changes and trends in sociodemographic characteristics, use patterns, and visitors' satisfaction. User studies at these parks and sites might also be conducted during other seasons of the year for comparison between seasonal visitors.

The methodology used in this study serves as a standard survey procedure that the DSP can use in the future. Because consistency should be built into the design of the survey instrument, sampling strategy, and data analysis (Peine et al., 1999), other Missouri state

parks and historic sites should be surveyed similarly to provide valid results for comparisons of visitor information between parks and sites, or to measure change over time in other parks and sites.

References

Alexander, G.D. (1993). Increasing customer satisfaction while cutting budgets. Proceeding of the 1993
Northeastern Recreation Research
Symposium, Saratoga Springs, New York, 167-173.

Armistead, J., & Ramthun, R. (1995). Influences on perceived crowding and satisfaction on the Blue Ridge Parkway. In Proceedings of the 1995 Northeastern Recreation Research Symposium (Forest Service General Technical Report NE-128, pp. 93-95). Saratoga Springs, NY: Department of Agriculture, Forest Service, Northeastern Forest Experiment Station.

Bergstrom, J.C. & Loomis, J.B. (1999). Economic Dimensions of Ecosystem Management. In H.K. Cordell & J.C. Bergstrom (Eds.), <u>Integrating social sciences with ecosystem management:</u> <u>Human dimensions in assessment, policy, and management</u> (pp. 181-193). Champaign, IL: Sagamore Publishing.

Brown, P.J., Dyer, A., & Whaley, R.S. (1973). Recreation research – so what. <u>Journal of Leisure Research</u>, 12 (3), 229-241.

Fink, D. A. (1997). Meramec State Park user survey. Unpublished master's research project, University of Missouri, Columbia.

Fredrickson, D. K., & Vessell, C. R. (2000a). 1999 Missouri State Parks visitor surveys: Overall 1999 composite. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2000b). 2000 Roaring River State Park visitor survey. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2001a). 2000 Castlewood State Park visitor survey. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2001b). 2000 Route 66 State Park visitor survey. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2001c). 2000 Arrow Rock State

<u>Historic Site visitor survey</u>. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2001d). 2000 Mark Twain Birthplace
State Historic Site visitor survey. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2001e). 2000 Mark Twain State Park visitor survey. Report submitted to the Missouri Department of Natural Resources.

Fredrickson, D. K., & Vessell, C. R. (2001f). 2000 Deutschheim State

<u>Historic Site visitor survey</u>. Report submitted to the Missouri Department of Natural Resources.

Fruchter, J., & Schau, M. (1997). At our leisure. New York, NY: EPM Communications, Inc.

Manning, R. E. (19999). <u>Studies in</u> outdoor recreation: <u>Search and research for satisfaction</u>. Corvallis, OR: Oregon State University Press.

Missouri State Census Data Center (MSCDC) (1998). Missouri census data [Online]. Available: http://www.oseda.missouri.edu.

Peine, J. D., Jones, R. E., English, M. R., & Wallace, S. E. (1999). Contributions of sociology to ecosystem management. In H. K. Cordell & J. C. Bergstrom (Eds.), Integrating social sciences with ecosystem management: Human dimensions in assessment, policy, and management (pp. 74-99). Champaign, IL: Sagamore Publishing.

Statistical Package for the Social Sciences (SPSS) (1996). Version 6.1 [Computer software]. Chicago, IL: SPSS.

U. S. Census Bureau (1999). United States and Missouri census data [Online]. Available: http://www.census.gov.

Williams, D. R. (1989). Great expectations and the limits to satisfaction: a review of recreation and consumer satisfaction research. Outdoor Recreation Benchmark 1988:

Proceedings of the National Outdoor Recreation Forum, Tampa, Florida, 422-438.

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ZUUU Missouri	State	Park and	Historic	Site	Visitor	Survey

Appendix A. 2000 Missouri State Park and Historic Site Visitor Surveys



Arrow Rock State Historic Site



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Arrow Rock State Historic Site. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this site. Thank you for your time.

1.	box.) θ yes θ no If		e Historic Site? (Check only one ow many times have you visited past year?
2.	overnight?		
	θ yes If yes, how many θ no (If no, skip to que		ou staying?
3.	θ campground in Arrow Rock θ nearby lodging facilities θ nearby bed and breakfast θ nearby campground θ friends/relatives θ other (Please specify.)		
4.	Who did you come to Arrow (Check only one box.) θ I came alone θ family & θ friends		Historic Site with during this visit? θ club or organized group θ other (Please specify.)
5.	you brought with you in you θ I came by tour bus	r personal ve	
	$\boldsymbol{\theta}$ I came by personal vehicle	adults _	children
6.	$\begin{array}{ccc} \textbf{Arrow Rock State Historic S} \\ \theta \ \text{picnicking} & \theta \\ \theta \ \text{fishing} & \theta \\ \theta \ \text{camping} & \theta \\ \theta \ \text{hiking} & \theta \\ \theta \ \text{walking} & \theta \\ \theta \ \text{viewing wildlife} & \theta \\ \theta \ \text{studying nature} & \theta \end{array}$	te? (Check as Friends of Arrow self-guided tour attending Lyceu shopping in Arro dining at the Olovisiting Sapping visiting Boone's	all that apply.) w Rock Historic Walking Tour r of historic buildings um Theatre production ow Rock

7. How satisfied are you with each of the following at Arrow Rock State Historic Site? (Check one box for each feature.)

		Very			Very	Don't
		Satisfied	Satisfied	Dissatisfied	Dissatisfied	Know
a.	campground	θ	θ	θ	θ	θ
b.	site signs	θ	θ	θ	θ	θ
c.	picnic areas	θ	θ	θ	θ	θ
d.	visitor center	θ	θ	θ	θ	θ
e.	The Old Tavern restaurant	θ	θ	θ	θ	θ
f.	hiking trail	θ	θ	θ	θ	θ

8. How do you rate Arrow Rock State Historic Site on each of the following? (Check one box for each feature.)

		Excellent	Good	Fair	Poor	Don't Know
a.	being free of litter & trash	θ	θ	θ	θ	θ
b.	having clean restrooms	θ	θ	θ	θ	θ
C.	upkeep of site facilities	θ	θ	θ	θ	θ
d.	having helpful & friendly staff	θ	θ	θ	θ	θ
e.	access for persons with disabilitie	es θ	θ	θ	θ	θ
f.	caring for the natural resources	θ	θ	θ	θ	θ
g.	caring for the cultural resources	θ	θ	θ	θ	θ
h.	being safe	θ	θ	θ	θ	θ

9.	If you did not rate the site as excellent on being safe, what influenced
	your rating?

10. Which of the following would mos	st increase	e your fee	ling of being	safe at
Arrow Rock State Historic Site?	Check onl	y one box.	.)	

θ more lighting	θ improved behavior of others
where?	θ increased visibility of site staff
θ less crowding	θ less traffic congestion
θ improved upkeep of facilities	θ nothing specific
θ increased law enforcement patrol	θ other (Please specify.)
·	, , , , ,

11. During this visit, how crowded did you feel?	(Circle one number.)
--	----------------------

1	2	3	4	5	6	7	8	9
Not at all		Slig	htly		Mode	erately		Extremely
Crowded		Crov	vded		Crow	vded		Crowded

12. If you felt crowded on this visit, where did you feel crowded?





3.	Overall, how satisfied are yes Site? (Check only one box.)	ou with this visit	to Arrow			Historic	19. If you have access to the Internet, how often do you use the Internet when planning a trip or vacation? (Check only one box.) θ never θ frequently
	Very	Diagonia (Co			Very	1	θ rarely θ always
	Satisfied Satisfied	Dissatisfie	d	Di	ssatisfie	ed	
	θ	θ			θ		20. What is your age? 21. Gender? θ female θ male
 4.	When visiting any state par these items to you? (Check		each feat	ure.)	t is eac Very Unimporta	Don't	22. What is the highest level of education you have completed? (Check onle one box.) θ grade school θ vocational school θ graduate of 4-year college
۱.	being free of litter & trash	θθθ		θ	θ		θ high school θ some college θ advanced graduate degree
).	having clean restrooms	θ θ θ)	θ	θ		O2 What is seen primary accounting (Observant and Love)
).	upkeep of site facilities	θ θ θ		θ	θ		23. What is your primary occupation? (Check only one box.)
i.	having helpful & friendly staff	θ θ θ)	θ	θ		θ homemaker θ professional/technical
) .	access for persons with disabilitie)	θ	θ		θ self-employed θ retired
	caring for the natural resources	θ θ θ)	θ	θ		θ service-based employee θ student
J.	caring for the cultural resources	θθθ)	θ	θ		θ manufacturing-based employee θ other (<i>Please specify.</i>)
١.	being safe	θ θ θ)	θ	θ		<u></u>
l 6.	Do you support setting asic reservation system in order When reserving a campsite not to exceed \$7.00? What is the value of Missou asked this guestion.	to reserve a site , would you be w θ yes ri state parks an	e? villing to µ θ no d historio	θ yes pay a r c sites	θ reserva ? We a	re often	 24. What is your household composition? (Check only one box.) θ single with no children θ married with children living at home θ single with children θ married with children grown θ other (Please specify.) 25. What is your ethnic origin? (Check only one box.) θ African American θ Asian θ White
	asked this question. As you are funded through a one-to We are interested in what you overall recreation opportunity.	enth cent sales to ou think. What v	ax approvalue wou	ved by Ild you	the vo	ters.	θ American Indian θ Hispanic θ other (Please specify.)
	ο ΦΟ man day ο ΦΕ man day	о Ф7		. 4 la .a .af			26. What is your 5-digit zip code (or country of residence, if you live outside th
	θ \$3 per day θ \$5 per day	y θ \$7 per da	у өс	otner \$			U.S.)?
8.	How do you typically receive Site or other Missouri state much information you receive.	parks and histor	ric sites?	Pleas			27. What is your annual household income? (Check only one box.) θ less than \$25,000 θ \$50,001 - \$75,000 θ \$25,000 - \$50,000 θ over \$75,000
			None S	Some	Lots	Know	28. Please write any additional comments about your site visit or
ì.	Internet		θ	θ	θ	θ	suggestions on how the Missouri Department of Natural Resources car
).	magazines		θ	θ	θ	θ	make your experience at Arrow Rock State Historic Site a better one.
	newspapers		θ	θ	θ	θ	
	direct mail		θ	θ	θ	θ	
	brochures, pamphlets, or other	r printed material	θ	θ	θ	θ	
	radio		θ	θ	θ	θ	
	television		θ	θ	θ	θ	
,	word of mouth, relatives, friend	ls. etc.	θ	θ	θ	θ	
	other (Please specify)	-,	A	A	A	A	

THANK YOU FOR YOUR HELP.
YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.



Castlewood State Park



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Castlewood State Park. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this park. Thank you for your time.

1.	Is this your first visit t ☐ yes	o Castlewood	State Pa	rk? (Check	only one b	ox.)
	no If no, about I	now many time		ou visited	the park in	the
2.	Who did you come to only one box.)	Castlewood St	ate Park	with durin	g this visit	? (Check
	☐ I came alone ☐ family	☐ family & fri ☐ friends	ends		or organizer (<i>Please</i> s	
3.	Did you bring a pet wi	th you during	this visit	? □ y	es 🗆	l no
4.	Which recreational activities are you engaging in during your visit to Castlewood State Park? (Check all that apply.) □ picnicking □ bicycling □ horseback riding □ fishing □ running/jogging □ attending a special event □ hiking □ viewing wildlife □ other (Please specify.) □ walking □ studying nature □ rollerblading □ canoeing or boating					
5.	How satisfied are you (Check one box for eac			ring at Cast Dissatisfied	Very	Don't
а	park signs					
	picnic areas					
	boat launches					
	trails					
6.	Have you had a positive (dog, cat, horse, etc.) □ positive □ neg	during your vi	sit at Cas	stlewood S		animal
7.	If you encountered a conjugate your experience.		_		please de	scribe

8.	How do you rate Castlewood	State Park	on each	of the	followin	ıg?				
	(Check one box for each feature	e.)				Don't				
		Excellent	Good	Fair	Poor	Know				
	being free of litter & trash									
	having clean restrooms									
	upkeep of park facilities									
d.	having helpful & friendly staff									
e.	access for persons with disabilitie	es 🗆								
f.	caring for the natural resources									
g.	providing nature displays									
ĥ.	being safe									
9. 10	 9. If you did not rate the park as excellent on being safe, what influenced your rating? 10. Which of the following would most increase your feeling of being safe at Castlewood State Park? (Check only one box.) 									
	☐ more lighting where?		nproved ocreased							
	□ less crowding		ess traffic			Stan				
	☐ improved upkeep of facilities		othing sp		Stion					
	☐ increased law enforcement p				ecify)					
	inoreased law emercement p		1101 (770	ado ope	ony.					
11	. During this visit, how crowde	d did you f	eel? (C	ircle on	e numbe	r.)				
	1 2 3 4	5 6	7	8	9					
No	t at all Slightly	-	oderately	Ū	Extrem	elv				
Cro	owded Crowded	C	Crowded		Crowd	•				
12	. If you felt crowded on this vis	it, where c	lid you f	eel cro	wded?					
13	13. Overall, how satisfied are you with this visit to Castlewood State Park? (Check only one box.)									
	Very				Ver	٧				
	Satisfied Satisfied	Dissa	tisfied		Dissat	,				
]							
	_ _	-			_					



PLEASE TURN SURVEY OVER.



14	. When visiting any state pa		portant i	s each of th	ese items	to you?	21. What is your primary occupation? (Check only one box.)
	(Check only one box for each	,			Very	Don't	□ homemaker □ retired
		Very Important	Important	Unimportant	Unimportant		☐ self-employed ☐ student
a.	being free of litter & trash						☐ service-based employee ☐ other (Please specify.)
	having clean restrooms						☐ manufacturing-based employee
	upkeep of park facilities						
	having helpful & friendly staff						22. What is your household composition? (Check only one box.)
	access for persons with disabiliti						☐ single with no children ☐ married with children living at home
	caring for the natural resources						☐ single with children ☐ married with children grown
	providing nature displays						☐ married with no children ☐ other (Please specify.)
	being safe						
15	. How do you typically receipted the Missouri state parks receive from the following	? Please i					23. What is your ethnic origin? (Check only one box.) ☐ African American ☐ Asian ☐ White ☐ American Indian ☐ Hispanic ☐ other (Please specify.)
	_					Don't	
			N	lone Some		Know	
a.	Internet						24. What is your 5-digit zip code (or country of residence, if you live outside the
b.	magazines						U.S.)?
	newspapers						
d.	direct mail						25. What is your annual household income? (Check only one box.)
	brochures, pamphlets, or other	er printed n	naterial				☐ less than \$25,000 ☐ \$50,001 - \$75,000
f.	radio						□ \$25,000 - \$50,000 □ over \$75,000
g.	television						
h.	word of mouth, relatives, frier	nds, etc.					26. Please write any additional comments about your park visit or
i.	other (Please specify.)						suggestions on how the Missouri Department of Natural Resources can make your experience at Castlewood State Park a better one.
16	. If you have access to the I when planning a trip or va ☐ never ☐ free ☐ rarely ☐ alw	cation? (C quently			the Interne	t	mane year experience at eacher coa clate i and a sector che.
17	. What is the value of Misso asked this question. As you are funded through a one- by the voters. We are inte you place on the overall re park?	ou know, Nenth centh rested in w	/lissouri s Parks an /hat you t	state parks a d Soils sale think. What	and histori s tax approvalue wou	c sites oved uld	
	□ \$3 per day □ \$5 per	day 🛭	\$7 per da	y □ othe	er \$		
18	. What is your age?	19.	Gender	? 🗆 fema	ıle □ ma	ale	
20	. What is the highest level of one box.) □ grade school □ vocati	f educatio		/e complete aduate of 4-y	•	-	THANK YOU FOR YOUR HELP.
	☐ high school ☐ some	college	□ad	vanced grad	uate degre	е	YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.



Deutschheim State Historic Site



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Deutschheim State Historic Site. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this site. Thank you for your time.

1.	Is this your first visit to Deutschheim State Historic Site? (Check only one box.) ρ yes					
	ρ no $% \left(\frac{1}{2}\right) =0$ If no, about how many times have you visited the site in the past?					
2.	During this visit to Deutschheim State Historic Site, are you staying overnight nearby?					
	ρ yes If yes, how many nights are you staying?					
	ρ no (If no, skip to question 4.)					
3.	If staying overnight, where are you staying? (Check only one box.) ρ nearby lodging facilities ρ friends/relatives ρ nearby bed & breakfast ρ other(Please specify.) ρ nearby campground					
4.	Who did you come to Deutschheim State Historic Site with during this visit? (Check only one box.) $ \rho \text{ I came alone } \rho \text{ family & friends} $					
5.	Please indicate the number of people you brought with you in your personal vehicle today. adults children					
6.	Which best describes your visit to Deutschheim State Historic Site? (Check only one box.)					
	 (Check only one box.) ρ Deutschheim State Historic Site was the primary purpose of my visit ρ Deutschheim State Historic Site is one among other destinations in the area ρ I found out about Deutschheim State Historic Site while visiting the Hermann area ρ other (Please specify.) 					

7. How satisfied are you with each of the following at Deutschheim State Historic Site? (Check one box for each feature.)

		Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
a.	Strehly House & Winery displays					
	& exhibits	ρ	ρ	ρ	ρ	ρ
b.	Barn displays & exhibits	ρ	ρ	ρ	ρ	ρ
c.	Heritage Gardens	ρ	ρ	ρ	ρ	ρ
d.	Pommer-Gentner House displays					
	& exhibits	ρ	ρ	ρ	ρ	ρ
e.	Museum office	ρ	ρ	ρ	ρ	ρ
f.	Museum shop	ρ	ρ	ρ	ρ	ρ
g.	Information provided by tour guide	ρ	ρ	ρ	ρ	ρ

8. How do you rate Deutschheim State Historic Site on each of the following? (Check one box for each feature.)

	I	Excellent	Good	Fair	Poor	Don't Know
a.	being free of litter & trash	ρ	ρ	ρ	ρ	ρ
b.	upkeep of site facilities	ρ	ρ	ρ	ρ	ρ
c.	having helpful & friendly staff	ρ	ρ	ρ	ρ	ρ
d.	access for persons with disabilitie	sρ	ρ	ρ	ρ	ρ
e.	caring for the natural resources	ρ	ρ	ρ	ρ	ρ
f.	caring for the cultural resources	ρ	ρ	ρ	ρ	ρ
g.	being safe	ρ	ρ	ρ	ρ	ρ

9.	If you did not rate the site as excellent on being safe, what influenced
	your rating?

10.	Which of the following would most	increase ye	our feeling	of being sa	afe a
	Deutschheim State Historic Site?	(Check only	one box.)		

Dediscrine in Otale Historic Oile:	(Official officials)
ρ less crowding	ρ nothing specific
ρ improved upkeep of facilities	ρ other <i>(Please specify.)</i>
ρ improved behavior of others	

11. During this visit to Deutschheim State Historic Site, how crowded did you feel? (Circle one number.)

1	2	3	4	5	6	7	8	9
Not at all		Slig	htly		Mode	erately		Extremely
Crowded	owded Crowded		vded		Crow	vded		Crowded

12. If you felt crowded on this visit, where did you feel crowded?



13.	Overall, h	now sa	atisfied are	you with	this	visit to	Deutschhein	n State
	Historic S	Site?	(Check only	y one box.)			

Very			Very
Satisfied	Satisfied	Dissatisfied	Dissatisfied
ρ	ρ	ρ	ρ

14. When visiting any state park or historic site, how important is each of these items to you? (Check only one box for each feature.)

		Very Important	Important	Unimportant	Very Unimportant	Don't Know
a.	being free of litter & trash	ρ	ρ	ρ	ρ	ρ
b.	upkeep of site facilities	ρ	ρ	ρ	ρ	ρ
c.	having helpful & friendly staff	ρ	ρ	ρ	ρ	ρ
d.	access for persons with disabilitie	sρ	ρ	ρ	ρ	ρ
e.	care of natural resources	ρ	ρ	ρ	ρ	ρ
f.	care of cultural resources	ρ	ρ	ρ	ρ	ρ
g.	being safe	ρ	ρ	ρ	ρ	ρ

15. How do you typically receive information about Deutschheim State Historic Site or other Missouri state parks and historic sites? Please indicate how much information you receive from the following sources:

	None	Some	Lots	Don't Know
a. Internet	ρ	ρ	ρ	ρ
b. magazines	ρ	ρ	ρ	ρ
c. newspapers	ρ	ρ	ρ	ρ
d. direct mail	ρ	ρ	ρ	ρ
e. brochures, pamphlets, or other printed material	ρ	ρ	ρ	ρ
f. radio	ρ	ρ	ρ	ρ
g. television	ρ	ρ	ρ	ρ
h. word of mouth, relatives, friends, etc.	ρ	ρ	ρ	ρ
i. other (Please specify.)	ρ	ρ	ρ	ρ

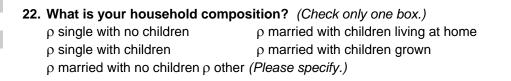
16. If you have access to the Internet, how often do you use the Internet when planning a trip or vacation? (Check only one box.)

 $\begin{array}{ll} \rho \; \text{never} & \quad \quad \rho \; \text{frequently} \\ \rho \; \text{rarely} & \quad \quad \rho \; \text{always} \end{array}$

17. What is the value of Missouri state parks and historic sites? We are often asked this question. As you know, Missouri state parks and historic sites are funded through a one-tenth cent Parks and Soils sales tax approved by the voters. We are interested in what you think. What value would you place on the overall recreation opportunity offered in a visit to this site?

 ρ \$3 per day ρ \$5 per day ρ \$7 per day ρ other \$_____

18.	What is your age	?	19.	Gend	der?	$\rho \text{ female}$	$\rho \text{ male}$
20.	What is the higher one box.)	est level of edu	ıcati	ion yo	u have	completed?	(Check only
	$\begin{array}{l} \rho \text{ grade school} \\ \rho \text{ high school} \end{array}$	ρ vocational s ρ some colleg				uate of 4-year inced graduate	•
21.	What is your prim ρ homemaker ρ self-employed ρ service-based en ρ manufacturing-b	mployee		ρ prof ρ retir ρ stud	ession ed lent	one box.) al/technical ase specify.)	



- 23. What is your ethnic origin? (Check only one box.)
 ρ African American
 ρ Asian
 ρ White
 ρ American Indian
 ρ Hispanic
 ρ other (Please specify.)
- **24. What is your 5-digit zip code** (or country of residence, if you live outside the U.S.)?

25. What is your annual household income? (Check only one box.)

 $\begin{array}{ll} \rho \text{ less than $25,000} & \rho \text{ $50,001 - $75,000} \\ \rho \text{ $25,000 - $50,000} & \rho \text{ over $75,000} \end{array}$

26. Please write any additional comments about your site visit or suggestions on how the Missouri Department of Natural Resources can make your experience at Deutschheim State Historic Site a better one.



Roaring River State Park



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Roaring River State Park. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this park. Thank you for your time.

1.	Is this your first visit to Roaring River State Park? (Check only one box.) □ yes □ no If no, about how many times have you visited the park in the past year?						
2.	During this visit to Roaring River State Park, are you staying overnight? ☐ yes						
3.	If staying overnight, where are you staying? □ campground in Roaring River State Park □ tent □ RV/trailer/camper/van conversion □ cabin in Roaring River State Park □ lodge in Roaring River State Park □ nearby lodging facilities □ nearby campground □ friends/relatives □ other (Please specify.)						
4.	Who did you come to Roaring River State Park with during this visit? (Check only one box.) ☐ I came alone ☐ family & friends ☐ club or organized group ☐ family ☐ friends ☐ other (Please specify.)						
5.	Please indicate the number of people you brought with you in your personal vehicle. adults children						
6.	Did you bring a pet with you during this visit? \Box yes \Box no						
7.	Which recreational activities are you engaging in during your visit to Roaring River State Park? (Check all that apply.) □ picnicking □ swimming in pool □ dining in lodge restaurant □ fishing □ horseback riding □ attending naturalist-led program □ camping □ horseback riding rental □ attending special event □ hiking □ viewing wildlife □ other (Please specify.) □ walking □ studying nature □ boating □ canoeing/floating						

8.	How satisfied are you with each of the following at Roa Park? (Check one box for each feature.)	ring River \$	State
	Very	Very	Don't

		Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don's Know
а	campground					
	park signs		$\overline{\Box}$			
	picnic areas					
	park store					Ē
	lodge restaurant					
	lodge inn		- i	Ī		Ī
	rental cabins					
	riding stable					Ē
	naturalist-led programs					
	trails					-
).	How do you rate Roaring I (Check one box for each fea					gr Oon't (now
۱.	being free of litter & trash					
).	having clean restrooms					
; .	upkeep of park facilities					
١.	having helpful & friendly staff					
١.	access for persons with disal	oilities \square				
	caring for the natural resourc		Г	1 П		П
					Ш	Ш
	providing nature programs &					
]. 1.	providing nature programs & being safe If you did not rate the park	displays				
j. 1.	providing nature programs & being safe	uld most in	ent on be	eing safe, v	what influe	nced





	 Have you had (dog, cat, hors □ positive If you encount 	se, etc.) during ☐ negative	your vis	sit at Roari no experie	ng River s nce	State Park	?	20.	If you have accewhen planning a ρ never ρ rarely	trip c		n?		•	Internet
	your experien					•		21.	What is your age	?		22.	Gender?	☐ female	□ male
10	6. Overall, how s (Check only on Very Satisfied			his visit to	Roaring	River State Very Dissatisfie			What is the higher one box.) ☐ grade school ☐ high school What is your print	□ vo	ocational s ome collec	scho ge	ol □ grad □ adv	duate of 4-year anced graduat	college
a.	vou? (Check of being free of litter having clean restriction)	only one box fo & trash	r each fea Very			Very	Don't		☐ homemaker ☐ self-employed ☐ service-based ☐ manufacturing-	emplo	yee		□ professior□ retired□ student		
c. d. e. f.	upkeep of park fact having helpful & fraccess for person caring for the nature providing nature p being safe	cilities riendly staff s with disabilities ıral resources	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □					25.	What is your hou ☐ single with no co ☐ single with child ☐ married with no	hildre dren	en .		married with	children living children grow	
18	B. How do you ty or other Misso you receive fro	ouri state park	s? Pleas	se indicate ses:	how muc	th informat	t ion Don't	26.	What is your eth ☐ African America ☐ American India	an	r igin? <i>(Cl</i> □ Asia □ Hisp	ın	□ Whi		cify.)
_	lata wast				ne Som		Know								
	Internet							27.	What is your 5-d	ait zi	p code (o	r coi	untry of resid	ence. if vou liv	e outside th
	magazines								U.S.)?					, , , , , , , , , , , , , , , , , , ,	
	newspapers														
	direct mail	سمطئم سمطئم						28.	What is your ann	ual h	ousehold	inc	ome? (Che	ck only one box	x.)
	brochures, pamp	pniets, or other	printed if						☐ less than \$25,0				- \$75,000	,	/
	radio								□ \$25,000 - \$50,0		□ over				
	television		1_						_ +_=,,,,,,			*	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	word of mouth, r		s, etc.					29.	Please write any	addit	ional con	nme	nts about vo	our park visit	or
I.	other (Please sp	<i>becity.)</i>				Ш			suggestions on						
19	o. What is the va often asked th historic sites a tax approved I value would yo visit to this pa	is question. A are funded thr by the voters. ou place on th	As you kr ough a o We are i	now, Misso ne-tenth c interested	ouri state ent Parks in what ye	parks and and Soils ou think. \	sales Vhat		make your exper						
	□ \$3 per day	□ \$5 per da	ay 🗆] \$7 per da	y 🗆 o	ther \$				TH	IANK YOU	J FC	OR YOUR HE	ELP.	

YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.



Route 66 State Park



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Route 66 State Park. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this park. Thank you for your time.

1. Is this your first visit to Route 66 State Park? (Check only one box.)

	□ yes □ no If no, about how many times have you visited the park in the past year?							
2.	Who did you co only one box.)	me to Route	66 State	Park wi	th during th	nis visit? ((Check	
	☐ I came alone	☐ family & ☐ friends	& friends		club or orga other <i>(Plea</i> s)	
3.	If you did not ar you brought wit ☐ I came by tour ☐ I came by pers	t h you in you r bus	r person	al vehic	le today.	umber of p	•	
4.	Did you bring a	pet with you	during	this visit	? □ ye	es 🗆	l no	
5.	Which recreation Route 66 State II picnicking fishing hiking walking bicycling	Park? (Checangle) □ running/jogue □ canoeing one □ viewing wildue □ studying na	k all that ging r boating dlife ture	apply.) □ \ □ a	visitina visita	or center special ever		
6.	How satisfied a			ne follow	ing at Rout	te 66 State	Park?	
	(Check one box	ioi eacri ieatu	Very		.	Very	Don't	
b. c.	park signs picnic areas hiking trails visitor center		Satisfied	Satisfied □ □ □ □ □ □	Dissatisfied □ □ □ □ □		Know	
	Route 66 exhibit							

7.	How do you rate Route 66 State Park on each of the following?
	(Check one box for each feature)

	(encon one box for each realing	··)				Don't
		Excellent	Good	Fair	Poor	Know
a.	being free of litter & trash					
	having clean restrooms					
	upkeep of park facilities					
d.	having helpful & friendly staff					
	access for persons with disabilitie	es 🗆				
	caring for the natural resources					
	providing informational displays					
h.	being safe					
8.	If you did not rate the park as your rating?			ı safe,	what infl	luenced
9.	Which of the following would Route 66 State Park? (Check of the check	only one		behavi visibili conge ecific	or of othe ty of park estion	ers
10.	During this visit, how crowded	d did you	feel? (Ci	ircle or	ne numbe	r.)
	1 2 3 4	5 (6 7	۶	3 9	
Not	at all Slightly		Moderately		Extrem	elv
Cro	wded Crowded		Crowded		Crowd	•
11.	If you felt crowded on this visi	it, where	did you fe	eel cro	owded?	
12.	Have you had a positive or a re (dog, cat, horse, etc.) during y □ positive □ negative	our visit	experienc at Route experience	66 Sta	a domes te Park?	stic animal
13.	If you encountered a domestic your experience.	animal	during yo	ur visi	t, please	describe







14. Overall, how satisfied are	you with this visit to Ro	ute 66 State Park?	21. What is the highest level of education you have completed? (Check only
(Check only one box.)		Von	one box.)
Very	Dissortisfied	Very	☐ grade school ☐ vocational school ☐ graduate of 4-year college
Satisfied Satisfied	I Dissatisfied	Dissatisfied □	☐ high school ☐ some college ☐ advanced graduate degree
	Ш		OO Mile of in communication of the contraction of t
15 When visiting any state r	ark how important is see	sh of those items to ve	22. What is your primary occupation? (Check only one box.)
15. When visiting any state p		on or these items to yo	·
(Check only one box for ea		Very Doi	□ self-employed □ retired
	Very Important Important Unir		Struce based employee
a. being free of litter & trash			
b. having clean restrooms			
c. upkeep of park facilities			
d. having helpful & friendly staff			
e. access for persons with disabil			☐ single with no children ☐ married with children living at home
f. caring for the natural resources			
g. providing informational display			\square married with no children \square other (<i>Please specify.</i>)
h. being safe			
16. How do you typically rec other Missouri state park information you receive t	s and historic sites? Ple	ase indicate how mucl	24. What is your ethnic origin? (Check only one box.) ☐ African American ☐ Asian ☐ White ☐ American Indian ☐ Hispanic ☐ other (Please specify.)
a. Internet			
b. magazines			25. What is your 5-digit zip code (or country of residence, if you live outside the
c. newspapers			U.S.)?
d. direct mail			0.3./:
e. brochures, pamphlets, or ot	her printed material		26. What is your annual household income? (Check only one boy.)
f. radio			26. What is your annual household income? (Check only one box.) □ less than \$25,000 □ \$50,001 - \$75,000
g. television			
h. word of mouth, relatives, frie	ends, etc.		□ \$25,000 - \$50,000 □ over \$75,000
i. other (Please specify.)			27. Places write any additional comments about your nark visit or
17. If you have access to the when planning a trip or v □ never □ fr			27. Please write any additional comments about your park visit or suggestions on how the Missouri Department of Natural Resources can make your experience at Route 66 State Park a better one.
are funded through a one	you know, Missouri state e-tenth cent Parks and So erested in what you think	parks and historic site ils sales tax approved . What value would	es
□ \$3 per day □ \$5 pe	r day □ \$7 per day	□ other \$	
19. What is your age?	20. Gender?	☐ female ☐ male	

THANK YOU FOR YOUR HELP.
YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.



Mark Twain State Park



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Mark Twain State Park. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this park and site. Thank you for your time.

1.	Is this your first visit to Mark Twain State Park? (Check only one box.) □ yes □ no If no, about how many times have you visited the park in the past year?
2.	During this visit to Mark Twain State Park, are you staying overnight? ☐ yes
3.	If staying overnight, where are you staying? □ campground in Mark Twain State Park □ tent □ RV/trailer/camper/van conversion □ nearby lodging facilities □ nearby campground □ friends/relatives □ other (Please specify.)
4.	Who did you come to Mark Twain State Park with during this visit? (Check only one box.) □ I came alone □ family & friends □ club or organized group □ other (Please specify.)
5.	Did you bring a pet with you during this visit? ☐ yes ☐ no
6.	Which recreational activities are you engaging in during your visit to Mark Twain State Park? (Check all that apply.) □ picnicking □ swimming □ attending special event □ fishing □ boating □ visiting Mark Twain Birthplace □ camping □ viewing wildlife □ State Historic Site □ hiking □ studying nature □ visiting Union Covered Bridge □ walking □ attending naturalist-led program □ State Historic Site
7.	Have you had a positive or a negative experience with a domestic animal (dog, cat, horse, etc.) during your visit to Mark Twain State Park? □ positive □ negative □ no experience
8.	If you encountered a domestic animal during your visit, please describe your experience.

9. How satisfied are you with each of the following at Mark Twain State

Park? (Check one box for ea	ach feature	e.)	J					
•	Very			Very	Don't			
a aaman awa wa d		Satisfied	Dissatisfied	Dissatisfied				
a. campground								
b. park signs			<u> </u>	<u> </u>				
c. picnic areas								
d. boat launches e. trails								
		H						
f. naturalist-led programs	ш	Ц	Ц	ш	Ц			
10. How do you rate Mark Twain State Park on each of the following? (Check one box for each feature.)								
	Fyzalla	C	-d F-:-		Don't			
a. being free of litter & trash	Excelle	nt God		Poor	Know			
b. having clean restrooms								
c. upkeep of park facilities								
d. having helpful & friendly staff								
e. access for persons with disabil								
f. caring for the natural resources		Ē						
g. providing nature programs & d								
h. being safe								
 11. If you did not rate the park a your rating? 12. Which of the following wou Mark Twain State Park? (California) 	ld most in	crease y	your feelin	g of being	g safe at			
☐ more lighting			ed behavio					
where? □ less crowding			sed visibility affic conges		.ali			
☐ improved upkeep of facilitie			g specific	SUOTI				
☐ increased law enforcement			Please spe	cify)				
increased law emercement	. patror E	2 011101 (1 10000 000	On y . /				
13. During this visit, how crowd	ded did yo	u feel?	(Circle one	e number.)				
	•		·	,				
1 2 3 4	5	6	7 8	9				
Not at all Slightly		Moderat		Extremel				
Crowded Crowded		Crowde	ea	Crowdeo	1			
14. If you felt crowded on this v	isit, wher	e did yo	u feel crov	wded?				





15	i. Camper cabins are wood st water, and are found at Lak	e of the Ozarks	State P	ark. Cu	rrently,	there	20.	when planni	ing a trip or	vacation	? (Check	en do you use the only one box.)	Internet
	are no camper cabins in Ma							□ never	□ rarely	□ fre	equently	□ always	
	cabins would enhance your (Check only one box.)	•	ce at ivia □ no	ırk iwai	n State i	Park?	21.	What is you	r age?	22.	Gender?	P ☐ female	□ male
16	6. Overall, how satisfied are y (Check only one box.) Very				Very		23.	one box.) □ grade sch	ool □ voo	ational sc	hool 🗆	have completed? I graduate of 4-year	college
	Satisfied Satisfied	Dissatisf □	ied	[Dissatisfio □	ed		☐ high school	ol □ son	ne college	· 🗆	l advanced graduat	e degree
a.	Check only one box for each	n feature.) Very Important Import	tant Unir	mportant	Very Unimporta	Don't ant Know	24.	What is you ☐ homemak ☐ self-emplo ☐ service-ba ☐ manufactu	er oyed ased employe	ee	☐ profe ☐ retire ☐ stude		
c. d. e. f.	having clean restrooms upkeep of park facilities having helpful & friendly staff access for persons with disabilitie caring for the natural resources providing nature programs & displ being safe						25.	What is you □ single with □ single with □ married w	n no children n children		☐ married ☐ married	neck only one box.) I with children living I with children grow Please specify.)	
18	B. How do you typically receive other Missouri state parks a information you receive fro	and historic sit	es? Ple	ase indi			26.	What is you ☐ African An ☐ American	nerican	jin? <i>(Che</i> □ Asian □ Hispa	·	e <i>box.)</i> I White I other <i>(Please spe</i> d	cify.)
			None	Some	Lots	Know					_		
	Internet						27.					residence, if you liv	e outside th
	magazines							U.S.) ?					
	newspapers direct mail						28	What is you	r annual hoi	usahald i	ncome? /	Check only one bo	v)
	brochures, pamphlets, or othe	r printed materia					20.	□ less than \$			01 - \$75,00		~. <i>)</i>
	radio	i printed materie						□ \$25,000 -		□ over \$			
	television							_ +_=,	.		,		
	word of mouth, relatives, friend	ds, etc.					29.	Please write	any additio	nal comr	nents abo	ut your park visit	or
	other (Please specify.)	<u> </u>										ent of Natural Res Park a better one	
19	What is the value of Missou asked this question. As yo are funded through a one-to by the voters. We are inter- you place on the overall rec park?	u know, Misso enth cent Parks ested in what y	uri state s and So ou think	parks a ils sale: . What	nd histo s tax app value w	oric sites proved ould		•	•				
	□ \$3 per day □ \$5 per d	ay □ \$7 pe	r day	□ othe	er \$				THA	NK YOU	FOR YOU	R HELP.	

THANK YOU FOR YOUR HELP.
YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.



Mark Twain Birthplace State Historic Site



The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Mark Twain Birthplace State Historic Site. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this site. Thank you for your time.

1.	Is this your first visit to Mark Twain Birthplace State Historic Site? (Check only one box.) □ yes □ no If no, about how many times have you visited the site in the past year?
2.	During this visit to Mark Twain Birthplace State Historic Site, are you staying overnight? ☐ yes
3.	If staying overnight, where are you staying? □ campground in Mark Twain State Park □ tent □ RV/trailer/camper □ nearby lodging facilities □ nearby campground □ lodging facilities □ nearby campground
4.	Who did you come to Mark Twain State Park with during this visit? (Check only one box.) ☐ I came alone ☐ family & friends ☐ club or organized group ☐ family ☐ friends ☐ other (Please specify.)
5.	If you did not arrive on a tour bus, please indicate the number of people you brought with you in your personal vehicle. □ I came by tour bus □ I came by personal vehicle adults children
6.	Did you bring a pet with you during this visit? ☐ yes ☐ no
7.	Which recreational activities are you engaging in during your visit to Mark Twain Birthplace State Historic Site? (Check all that apply.) picnicking studying nature fishing attending naturalist-led program camping attending special event hiking visiting Mark Twain Birthplace Museum walking visiting Union Covered Bridge State Historic Site boating other (Please specify.)

State Historic Site? (Check	one box fo			k Twain Birt	пріасс
	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
site signs					INIOW
picnic area & playground					
museum displays					
information provided by tour	guide 🗆				
How do you rate Mark Twai			Historic S	ite on each	of the
following? (Check one box	tor each te	ature.)		5	
	Excell	ent Go	od Fair		on't now
being free of litter & trash					
having clean restrooms					
upkeep of site facilities			1		
having helpful & friendly staff					ī
access for persons with disal	oilities 🗆		1		
caring for the natural resource					
caring for the cultural resource					
being safe					
your rating?					
1. Which of the following work Mark Twain Birthplace Sta □ less crowding □ improved upkeep of facilit □ improved behavior of other	te Historio ies	Site? (□ less tr □ nothin		one box.) stion	safe a
Which of the following work Mark Twain Birthplace Sta □ less crowding □ improved upkeep of facility	te Historio ies ers	Site? (☐ less tr ☐ nothin ☐ other	Check only affic conge g specific (Please spe	one box.) stion ecify.) e number.)	safe a
1. Which of the following work Mark Twain Birthplace Sta less crowding improved upkeep of facilit improved behavior of other. 2. During this visit, how crow	te Historio ies ers vded did y	Site? (less tr nothin other ou feel?	Check only affic conge g specific (Please spe (Circle on 7 8	one box.) stion ecify.) e number.)	safe a
1. Which of the following work Mark Twain Birthplace Sta less crowding improved upkeep of facilit improved behavior of other less crowding improved behavior of other less crowding improved behavior of other less crowding in the less crowdin	te Historio ies ers vded did y	Site? (less tr nothin other ou feel?	Check only affic conge g specific (Please specific (Circle on 7 8) tely	e number.)	safe a
1. Which of the following wo Mark Twain Birthplace Sta less crowding improved upkeep of facilit improved behavior of other less crowding improved behavior of other less crowded less c	te Historio ies ers vded did y 5 visit, whe	c Site? (less tr nothin other ou feel? 6 Modera Crowdere did your experience.	Check only affic conge g specific (Please specific (Circle on 7 8) tely ed Du feel cro	e number.) Streen of the street of the stree	anima
1. Which of the following wo Mark Twain Birthplace Sta less crowding improved upkeep of facilit improved behavior of other. 2. During this visit, how crow 1 2 3 4 ot at all Slightly rowded Crowded 3. If you felt crowded on this	te Historio ies ers vded did y 5 visit, whe	c Site? (less tr nothin other ou feel? 6 Modera Crowdere did your experience.	Check only affic conge g specific (Please specific (Circle on 7 8) tely ed Du feel cro ience with rk Twain E	e number.) Streen of the street of the stree	anima







15	. If you encount your experience		tic animal during	g your v	visit, ple	ease des	scribe		What is your age			Gender?	☐ female	□ male
								23.	What is the high	est level of e	educati	ion you ha	ive complete	d? (Check on
16	. Overall, how s	satisfied are vo	u with this visit	to Mari	k Twain	Birthol	ace		one box.) □ grade school	□ vocation	al scho	ol 🗆 a	raduate of 4-y	ear college
. •		Site? (Check of				p.			☐ high school	□ some co			dvanced grad	•
	Very	()	, , , , , , , , , , , , , , , , , , , ,			Very			g					g
	Satisfied	Satisfied	Dissatisfie	d	D	issatisfie	ed he	24	What is your prin	nary occupa	ation?	(Check or	lv one box)	
				u			Ju		□ homemaker	nary cocupe			ional/technica	ı
	_	_	_						□ self-employed			□ retired	ional/teeninee	u
17	. When visiting	any state nark	or historic site	how in	nnortan	t is ear	h of		☐ service-based	amployee		□ student		
.,			only one box for			it is cac	0.		☐ manufacturing-				Please specify	,)
	these items to	you: (Oncon	Very	caciiic	aturo.)	Very	Don't		□ manufacturing-	baseu empio	yee	U other (F	lease specify	•)
			Important Importan	t Unim	portant		ant Know							
a.	being free of litter	& trash							14 0 4 1 1		.,.	• (0)		,
	having clean restr							25.	What is your hou					
	upkeep of park fac								\square single with no α				rith children liv	
d.	having helpful & fr	riendly staff							☐ single with child				rith children g	rown
e.	access for person	s with disabilities							☐ married with no	children		other (Ple	ase specify.)	
f.	caring for the natu	ıral resources										-		
g.	caring for the cultu	ural resources												
h.	being safe							26.	What is your eth	nic origin?	(Check	only one i	box.)	
									☐ African Americ		sian		/hite	
18	. How do you ty	pically receive	information ab	out Ma	rk Twai	n Birthp	lace		☐ American India		lispanic		ther <i>(Please</i> s	enecify)
			lissouri state pa						□ American mula		iispariic	,	illel (1 16ase s	specify.)
			formation you											
	sources:	o now maon m	inormation your	000.70		0 1011011	Don't		VA/II. = (!=					Para table de
	30ui 003.			None	Some	Lots	Know	27.	What is your 5-d				siaence, it you	i iive outsiae tr
а	Internet								U.S.) ?					
	magazines													
								28.	What is your ann		old inc	ome? (Cl	neck only one	box.)
	newspapers								\square less than \$25,0	000 🗆 \$	50,001	- \$75,000		
	direct mail	11.							□ \$25,000 - \$50,0	000 □ oʻ	ver \$75	5,000		
	brochures, pamp	phlets, or other	printed material						, ,		•	•		
f.	radio							29	Please write any	additional c	omme	nts about	vour site vis	it or
g.	television								suggestions on					
h.	word of mouth, r	relatives, friends	s, etc.						make your exper					
i.	other (Please sp	pecify.)							•	ience at iviai	ik iwa	iii birtiipid	ice State mis	ionic Site a
	(110000000	, , , , , , , , , , , , , , , , , , ,							better one.					
19		g a trip or vaca	ernet, how ofter tion? <i>(Check or</i> □ frequently	nly one i	box.)	e Intern	net							
20	are funded thr	estion. As you ough a one-tei	i state parks an know, Missour nth cent Parks a sted in what you	i state p ınd Soi	parks ar Is sales	nd histo tax app	ric sites proved							
			eation opportui											
	□ \$3 per day	□ \$5 per da	y □ \$7 per o	lay	□ other	· \$			YOU ARE A			OR YOUR E IN MISSO	HELP. DURI STATE	PARKS.

	2000 Missouri State Park and Historic Site Visitor Survey
Appendix B. Su	arvey Protocol

Protocol for 1999 Missouri State Parks Visitor Survey

Hi, my nam	ne is, and	I am conducting a survey of park visitors
for Missouri state	parks. The info	ormation that I am collecting will be useful
for future manage	ment of	State Park.
minutes to completing and by completing in a drawing for a	ete. Anyone wh g the survey, you prize package o	nt and back side, and only takes about 3-5 to is 18 or older may complete the survey, to have the opportunity to enter your name of \$100 worth of concession coupons. In a your responses will be completely
Your input	• •	nt to the management of ate Park. Would you be willing to help by
participating in the		ate I ark. Would you be willing to help by
[If no,]	Thank you for	your time. Have a nice day.
[If yes,]		

Here is a pencil and clipboard with the survey attached (for each respondent). Please complete the survey on both sides. When finished, return the survey(s), clipboard(s), pencils, and prize entry form(s) to me.

Thank you for taking time to complete the survey. Your help is greatly appreciated. Have a nice day.

	2000 Missouri State Park and Historic Site Visitor Survey
Appendix C. P	rize Entry Form

WIN A PRIZE PACKAGE OF CONESSION COUPONS WORTH \$100

Enter a drawing to win \$100 worth of concession gift certificates! These certificates are good for any concessions at any state park or historic site. Concessions include cabin rentals, canoe rentals, boat rentals, restaurant dining, horseback riding, etc.

You many enter the drawing by simply filling out the back of this entry form and returning it to the surveyor. Your name, address, and telephone number will be used only for this drawing; your survey responses will be anonymous. The drawing will be held January 2, 2001. Winners will be notified by telephone or mail. Redemption of gift certificates is based on dates of availability through August 31, 2001.

Name:					
Address:					
Phone #:)			
Would you Resources residents?	magazine,		rly magaz	_	on to <i>Missour</i> Missouri